

CLAIMS

1. A composition for dispersing of a particle, characterized in being obtained by mixing a metal alkoxide containing a metal element having +3 to 5 valence, an organic acid and water.
2. The composition for dispersing of a particle according to Claim 1, which is obtained by mixing a hydrolysate derived from said metal alkoxide, and said organic acid, and which is a transparent aqueous solution.
3. The composition for dispersing of a particle according to Claim 1 or 2, wherein said metal element is one element selected from the group consisting of aluminum, titanium, niobium and tantalum.
4. The composition for dispersing of a particle according to Claim 1 or 2, wherein said metal element is aluminum or titanium.
5. The composition for dispersing of a particle according to any one of Claims 1 to 4, wherein said organic acid is at least one type selected from the group consisting of lactic acid, oxalic acid, citric acid and tartaric acid.
6. The composition for dispersing of a particle according to any one of Claims 1 to 5, wherein the mixing proportion of said organic acid and said metal alkoxide (organic acid : metal alkoxide), is (0.5 - 2) : 1 by molar ratio.
7. A composition for dispersing of a particle, characterized in that said composition is obtained by mixing a titanium alkoxide, at least one type of an organic acid selected from the group consisting of lactic acid, oxalic acid, citric acid and tartaric acid, and water; and that the mixing proportion of said titanium alkoxide and said organic acid (organic acid : titanium alkoxide), is (0.7 - 1.5) : 1 by molar ratio.
8. A composition having a particle dispersed therein, characterized in comprising a particle and said composition for dispersing of a particle according to any one of Claims 1 to 7.
9. The composition having a particle dispersed therein according to 8, wherein said particle is an oxide particle.
10. The composition having a particle dispersed therein according to Claim 8 or 9, wherein the content of said particles is 60 % by

volume or less.

11. The composition having a particle dispersed therein according to any one of Claims 8 to 10, wherein pH is in the range from 2 to 11.

12. The composition having a particle dispersed therein according to any one of Claims 8 to 11, which is used in an application for ceramic material, photocatalytic material, optical material or electronic material.

13. A composition having a particle dispersed therein, characterized in comprising an anatase-type titanium oxide particle and said composition for dispersing of a particle according to Claim 7.

14. A sintered compact of anatase-type titanium oxide, characterized in that the solid fraction of said composition having a particle dispersed therein according to Claim 13 is sintered.

15. The sintered compact of anatase-type titanium oxide according to Claim 14, wherein the sintering temperature is in the range from 300 to 750°C.

16. The sintered compact of anatase-type titanium oxide according to Claim 14 or 15, which is used in an application for photocatalytic material or solar cell material.

17. A process for producing a composition having a particle dispersed therein, characterized in that said process comprises a mixing step for mixing said composition for dispersing of a particle according to any one of Claims 1 to 7, a particle and a solvent, and that the amount of said composition to be mixed is adjusted depending on the isoelectric point of said particle in said mixing step.

18. The process for producing a composition having a particle dispersed therein according to Claim 17, wherein said solvent is water.